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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,694	02/03/2005	Kazuki Honda	2005_0064A	8538

52349 7590 11/16/2006

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EXAMINER

LUKS, JEREMY AUSTIN

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/523,694	Applicant(s) HONDA ET AL.	
	Examiner Jeremy Luks	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/3/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 8-10 and 14 rejected under 35 U.S.C. 102(b) as being anticipated by Honda (JP 05103395 A). Honda teaches a suspension (Figure 1a) comprising: a plurality of roll sections (12) each of which has a semi-cylindrical shape in a cross section (See Figure 1b), wherein the roll sections (Figure 1a, #12) are disposed radially side by side at regular intervals based on a straight line (15 and 13) connecting two points on an inner periphery (14) or an outer periphery (11), wherein the roll sections (12) form a closed loop in a manner that a roll section (12) of the roll sections (12) being disposed first adjoins a roll section (12) of the roll sections (12) being disposed last, wherein adjacent roll sections (12) are coupled with each other through a boundary section (Figure 1 shows boundary sections between adjacent roll sections (12)) forming a continuous three dimensional curved surface; wherein the inner periphery (14) is coupled with the roll sections (12) forming the closed loop, and non-continuous parts of the inner periphery (14) are trimmed, wherein the outer periphery (11) has a frame fixing part (See translated Abstract) for being fixed at a frame (Abstract); wherein the outer periphery (11) is coupled with the roll sections (12) forming the closed loop, and non-continuous parts of the outer periphery (11) are trimmed, wherein the inner periphery

Art Unit: 2837

(Figure 2, #11) has a vibration system fixing part for fixing a diaphragm or a voice coil (16); and wherein the inner periphery (14) is coupled with a voice coil (16) placed in a magnetic gap of a magnetic circuit or an outer periphery part of a diaphragm coupled with the voice coil (16 (See Abstract)), wherein the outer periphery (11) is fixed to a frame which supports the magnetic circuit and a vibration system (See abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda (JP 05103395 A) in view of Saiki (6,208,237). Honda is relied upon for the reasons and disclosure set forth above. Honda further teaches an even number of roll sections (Figure 1a, #12). Honda fails to teach wherein an odd number of the roll sections are disposed; two suspensions being disposed in a substantially vertical direction; and wherein one of the suspensions is rotated by 1/2 of a width of the roll section with respect to an axis in a periphery direction. With respect to the odd number of roll sections, it would have been an obvious matter of design choice to employ an odd number of roll sections, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Saiki teaches two suspensions (Figure 14-16, # 63 and 64)

Art Unit: 2837

being disposed in a substantially vertical direction; and wherein one of the suspensions (64) is rotated with respect to an axis in a periphery direction (Col. 15, Lines 7-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Honda, with the apparatus of Saiki to ensure that the moving parts vibrate stably. Saiki fails to teach wherein the suspension is rotated by 1/2 of a width of the roll section. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to rotate the suspension by 1/2 of a width of the roll section, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working range involves only routine skill in the art. In re Aller, 105 USPQ 233.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to suspensions and electro-acoustic transducers using the suspensions are disclosed in the PTO-892.

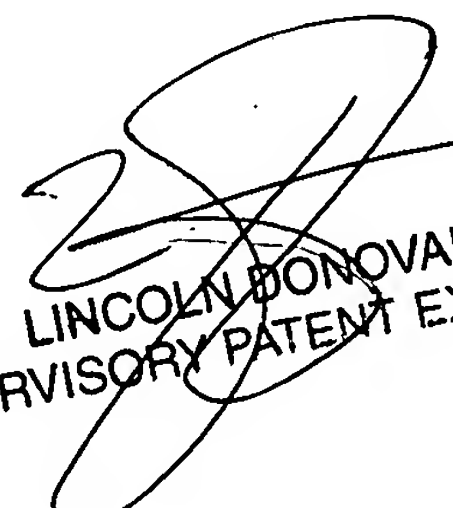
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks
Patent Examiner
Art Unit 2837
Class 181



LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER